

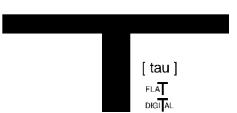
Panasonic



TX-32PS10F

TX-28PS10F

Colour television



Quintrix F
100HZ
SUPER DIGITAL SCAN



Operating Instructions

English

TQB8E3762eng-S

this is an unapproved issue — for information only

WELCOME

NO TAG

Dear Panasonic Customer,

Welcome to the Panasonic family of customers. We hope that you have many years of enjoyment from your new colour television. This is a very advanced television; however, the Quick Start Guide will tell you how to have the TV operating quickly. You can then read the instructions completely and retain them for future reference.

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WARNINGS AND PRECAUTIONS

- This TV set is designed to operate on A.C. 220 - 240V, 50Hz.
- To prevent damage which might result in electric shock or fire, do not expose this TV set to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.
- **WARNING : HIGH VOLTAGE !!!**
Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.
- Avoid exposing the TV set to direct sunlight and other sources of heat. To prevent fire, never place any type of candle or naked flame on top of, or near the TV set.
- The On/Off switch on this model does not fully disconnect the TV from the mains supply. Remove the mains plug from the wall socket when the TV set is not used for a prolonged period of time.
- **CABINET AND PICTURE TUBE CARE**
Remove the mains plug from the wall socket. The cabinet and picture tube can be cleaned with a soft cloth moistened with mild detergent and water. Do not use solutions containing benzol or petroleum. TV sets can produce static electricity, care must be taken whenever touching the TV screen.

- Adequate ventilation is essential to prevent failure of electrical components, we recommend that a gap of at least 5cm is left all around this television receiver even when it is placed inside a cabinet or between shelves.

■ TV GAMES / HOME COMPUTERS

Extended use of TV games or home computers with any television set can cause a permanent 'shadow' on the screen. This type of irreversible picture tube damage, can be limited by observing the following points:

- Reduce the brightness and contrast levels to a minimum viewing level.
- Do not operate the television set for a continuous period of time while using TV games or home computers.
- This type of picture tube damage, is not an operating defect, and as such is not covered by the Panasonic warranty.

■ SLEEP FEATURE

If the set is not switched off when the TV station stops transmitting, it will automatically go to standby mode after 30 minutes. This function will not operate when the TV is in AV mode.

Check that you have the accessories and items shown



Operating Instruction book



Remote Control Transmitter EUR511212A



Batteries for the Remote Control Transmitter.
(2 x R6 (UM3) size)



Remote control batteries

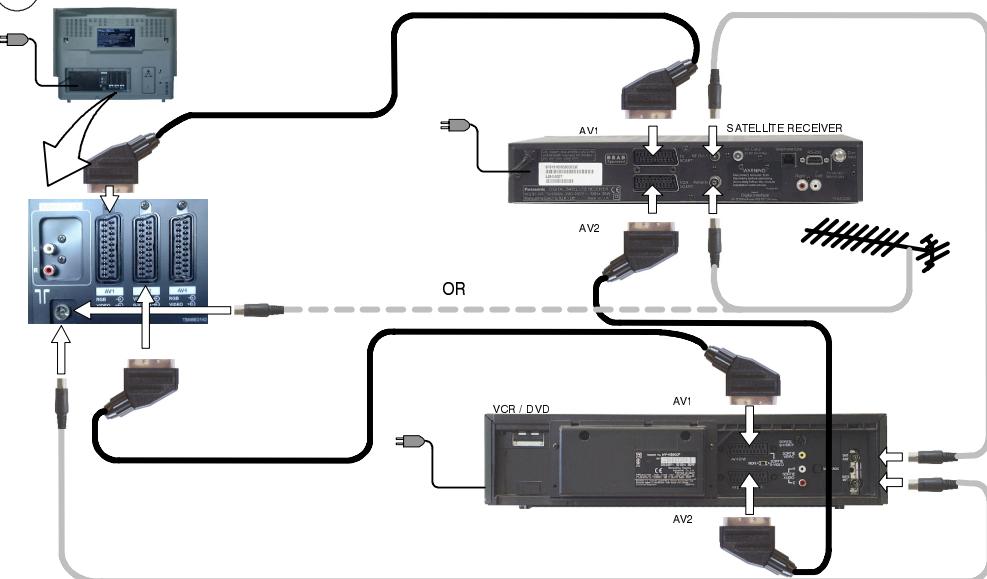


- Make sure that the batteries are fitted the correct way round.
- Do not mix old batteries with new batteries. Remove old, exhausted batteries immediately.
- Do not mix different battery types, i.e. Alkaline and Manganese or use rechargeable (Ni-Cad) batteries.

QUICK START GUIDE

1

Plug in aerial and connect ancillary equipment.



2

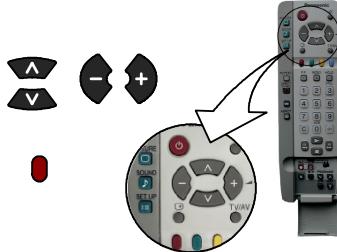
First, ensure that the VCR is in Standby mode.

Plug in TV and switch on.

3

Select your country.

Press the red button



4

Auto setup is in progress.
SEARCHING... PLEASE WAIT
SEARCH : CH1 XYZ
50 5912 41

STOP : Return to standby mode
TV/AV : To next

Auto setup will begin, your stations will be located and stored.
Use the Programme Edit menu to delete unwanted stations
(see page 15).

Press the TV/AV button to exit.

TV/AV



5

If you are installing a new Q-Link compatible VCR, you can now switch it ON. Downloaded tuning data will match the television's.

If you are installing a new NEXTVIEWLINK compatible VCR, you will need to initiate download manually.
See the VCR handbook for details.

- If the VCR has not accepted download data from the TV, you may need to select the Download option from the VCR's menu.
- If Q-Link is not operating correctly, check it is connected to the television's AV2 socket, the SCART lead is a "full function" type, and the VCR is compatible with Q-Link, NEXTVIEWLINK or similar technologies. Ask your dealer for further details.
- For further information on Q-Link and connecting equipment, see pages 21, 25 and 26.

4

QUICK START GUIDE

6 We recommend that as soon as the **Auto setup** feature is completed, the picture controls are reset to normal viewing levels. To do this, press the "N" button, found under the remote control's pull down flap.

N

7 Slight tilting of the picture may be noticeable or coloured patches may sometimes appear at the corners of the screen (colour purity). The Geomagnetic Correction feature can be used to eliminate them, if necessary:

First, ensure the ATP and Q-Link download procedures are complete. The screen should not be showing any On-Screen Display menus.

Using the remote control keys indicated, access the **Geomagnetic Correction** menu option and follow the procedure below (for a full explanation of the On Screen Display menu system see page 7):

Press the **SETUP** menu button

Move to the **Geomagnetic** menu option

Access the **Geomagnetic** menu

Adjust the picture tilt as necessary

Press the **TV/AV** button to exit the **SETUP** menu



The function 'geomagnetic correction' is also accessible from the front panel.

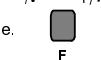
Press and release here to open flap



Press the **F** button repeatedly until the Geomagnetic Correction feature is displayed.

F

Press the + or - buttons repeatedly until the picture appears to be level.

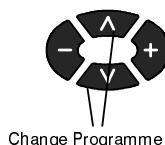


Press the **F** button again to return to normal viewing. Close the flap to prevent damage.

8

You are now ready to begin viewing programmes

The cursor controls provide the two basic functions:



BASIC CONTROLS : FRONT PANEL AND REMOTE CONTROL



MAINS
Power On/Off switch

Red light indicates Standby mode.

STR (Normalisation store)
Used to store tuning and other function settings

F (Function select)

Displays the On Screen Display functions, use repeatedly to select from the available functions - Volume, Contrast, Brightness, Colour, Sharpness, Tint (in NTSC mode), Bass, Treble, Balance, Tuning mode and Geomagnetic Correction.

Increases or decreases the programme position by one. When a function is already displayed, press to increase or decrease the selected function.

Standby ON/OFF switch
Switches TV On or Off standby

Menu buttons
Press to access the Picture, Sound and Setup menus (see page 7).

Status button
Press to display programme position, programme name, channel number, TV system, time stereo mode and programme table.

Teletext buttons (see page 23)

Direct TV Record button
(see page 21)

Ambience on/off

Aspect control button (see page 8)

Direct Channel Access
During normal TV viewing or when in the Tuning, Programme edit or Manual tuning menus, press and then enter channel number using the numeric buttons.

The N button will recall settings stored with STR.

STR (Normalisation store)



Sound mute On/Off

Cursor buttons to make selections and adjustments.

Switch between viewing TV or AV input (see page 25)

Coloured buttons used for Programme Edit functions (see page 15) Teletext functions (see page 23) AV selection (see page 25)

Programme / channel change buttons (0-9) and Teletext page buttons (see page 23)

Programme position for selection of two digit programmes (10-99) using numeric buttons.

Press the "C" and "-/-" buttons for Direct Channel Access in hyperband.

VCR / DVD buttons (see page 22)

The Help button provides a demonstration of On Screen Display menus

USING THE ON SCREEN DISPLAYS

This TV has a comprehensive system of On Screen Display menus to access adjustments and options

Some selections, for example, **Contrast**, **Brightness**, **Colour** and **Sharpness** will allow you to increase or decrease their level.

Some selections, for example, **Off timer**, allow a choice to be made.

Some selections, for example **Tuning menu**, will lead to a further menu.

The **PICTURE**, **SOUND** and **SET UP** buttons are used to open the main menus and also to return to the previous menu.

The up and down cursor buttons are used to move the cursor up and down the menus.

The left and right cursor buttons are used to access menus, adjust levels or to select from a range of options.

The **STR** button is used to store settings after adjustments have been made or options have been set.

The **TV/AV** button is used to exit the menu system and return to the normal viewing screen.

An On Screen Help box is displayed whenever a menu is displayed on the TV. This Help box indicates which keys on the remote control are used to navigate the menu shown, see above for descriptions of button functions.

Note:

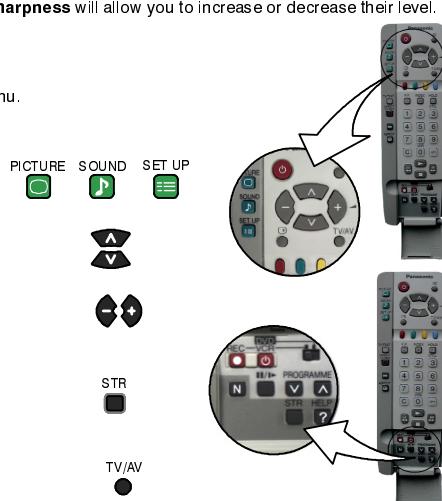
- If the **HELP** button is pressed while a menu is displayed, the 'Instructions' box will be hidden from view. Press the **HELP** button again to show the 'Instructions' box.
- The Help box is not shown in the menu pictures in this instruction book due to space limitations.

The **HELP** button runs a demonstration of the menus available.

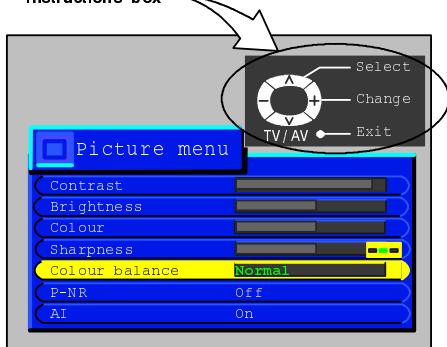
Press **Λ** **∨** buttons and select one of the options

Last Position Memory

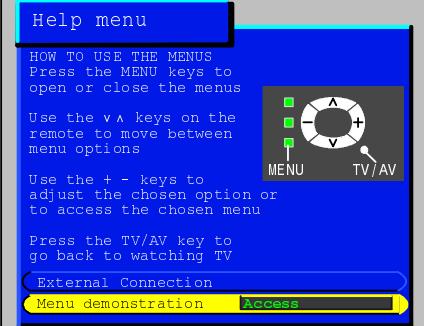
Certain functions have a last position memory, i.e. the setting at the time of switch-off will be the setting used when the receiver is switched on again.



ON SCREEN HELP
'Instructions' box



HELP



ASPECT CONTROLS

The widescreen TV will allow you to enjoy viewing the picture at its optimum size and aspect, including Widescreen 'cinema format' pictures.

Press the ASPECT button repeatedly to move through the seven aspect options: Panasonic Auto, 16:9, Just, 4:3, Zoom1, Zoom2 and Zoom3.

OR

Press the ASPECT button then use the RED or GREEN buttons to move in either direction through the seven aspect options.



Panasonic Auto

Panasonic Auto determines the best aspect ratio to use to display the picture you are viewing. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If **Panasonic Auto** detects a widescreen signal it switches into **16:9** widescreen mode. If **Panasonic Auto** does not detect a widescreen signal then this advanced TV set enhances the picture for optimum viewing pleasure.



The text shown on the screen indicates how **Panasonic Auto** determined which ratio to use:

'WIDE' appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal is found through a Scart socket. **Panasonic Auto** switches into **16:9** widescreen ratio.

'Panasonic Auto' appears in the top left of the screen if black stripes above and below the picture are detected. **Panasonic Auto** chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending how dark the picture is.

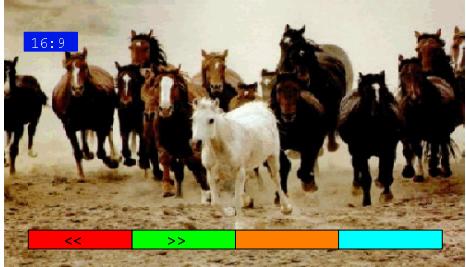
Equally, you may prefer to select one of the other modes available to view the picture.

Notes:

- If, in **Panasonic Auto** mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control of your VCR requires adjustment (your VCR instruction book will contain adjustment details).
- The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.

16:9

16:9 will display a true 16:9 (anamorphic) picture with no aspect distortions.



16:9 (Full)

14:9

14:9 will display a true 14:9 picture with no aspect distortions.



14:9

ASPECT CONTROLS

Just

Use this mode when you wish to expand a 4:3 picture to fill the whole screen (rather than watching a programme with black stripes down the left and right sides of the picture). The 4:3 picture will be stretched horizontally so that the image fills the screen, this is done in such a way that the stretching is only obvious at the left and right edges of the screen.



Just

4:3

4:3 will display a 4:3 picture at its standard 4:3 size with no aspect distortions.



4:3

Zoom1

Zoom1 will display 16:9 letterbox or 4:3 pictures with no aspect distortions



Zoom 1

Zoom2

Zoom2 will display 16:9 anamorphic letterbox pictures as a full screen display with no aspect distortions



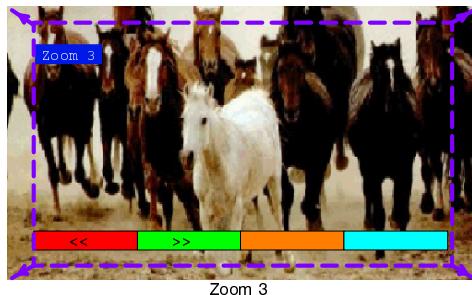
Zoom 2

ASPECT CONTROLS

Zoom3

Zoom3 will display 21:9 letterbox pictures as a full screen display with no aspect distortions

16:9 will display the picture at its maximum size but with slight stretching.



Zoom 3

STILL CONTROL

The **STILL** key allows you to freeze the picture at any time.



HOLD



STILL



PICTURE AND TEXT

Press the **TELETEXT** button to move between watching the current programme, viewing teletext and the **picture and text** feature. **Picture and text** lets you see the current programme and a page of teletext side by side.

Whilst using this feature, the remote control affects the teletext page; if you wish to make changes to the programme viewed press the **TELETEXT** button to return to watching the programme on its own then make the desired changes.

TV/TEXT



TV/TEXT

TELETEXT

TELETEXT



TELETEXT



TELETEXT



TELETEXT



TELETEXT



TELETEXT



TELETEXT



TELETEXT



TELETEXT

TELETEXT



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TELETEXT



TELETEXT



TELETEXT



TELETEXT

TELETEXT

PICTURE MENU

This menu allows you to make adjustments to the picture quality

Open the Picture menu



Move to your choice



Increase or decrease levels or set options



Press the TV/AV button to exit the Picture menu

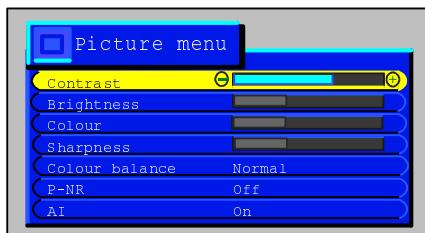


Pressing the STR button after having adjusted a feature will store the setting as the default (replacing the factory setting)



Contrast Brightness Colour Sharpness

The Contrast, Brightness, Colour and Sharpness levels can be adjusted to suit your own preferences and the viewing conditions.



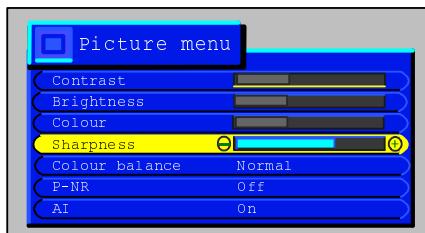
Tint

The Tint adjustment will only appear as a menu item if you have an NTSC signal source connected to the TV and will allow adjustment of the hue.

Colour balance



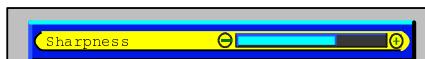
The Colour balance setting allows you to set the overall colour tone of the picture.



P-NR



P-NR will automatically reduce unwanted picture interference.



AI



The AI setting automatically analyses the incoming picture and processes it to give improved contrast, optimum depth of field and vivid colour tones.



SOUND MENU

The Sound menu will allow you to set your personal preferences for all aspects of sound quality

Open the Sound menu



Move to your choice

Increase or decrease levels or set options

Press the TV/AV button to exit the Sound menu

Pressing the STR button after having adjusted a feature will store the setting as the default (replacing the factory setting)



Volume

The Volume adjustment sets the overall output volume.

Bass

Bass adjustment will emphasise the lower, deeper frequencies and can be increased or decreased.

Treble

Treble adjustment will emphasise the sharper, higher frequencies and can be increased or decreased.

Balance

Balance affects the levels of sound between the left and right speakers. Adjustment can be made so that the level from the speakers will suit your listening position.

Headphone volume

Can be adjusted independently of the TV speakers so that everyone can enjoy listening at a level comfortable for them.

MPX



MPX will usually be set to Stereo to provide the best reproduction, however if reception deteriorates or if the service is not available then it is advisable to switch to Mono. Mono M1 and M2 can also be selected if signals are being transmitted.

Mode

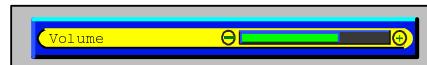
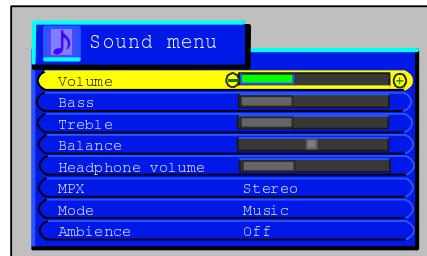


The sound can be improved during Music or Speech mode by selecting the appropriate function.

Ambience



Ambience provides a dynamic enhancer to simulate improved spatial effects.



SETUP MENU

The Setup menu provides access to various advanced features and also to the Tuning menu

Open the Setup menu

SET UP



Move to your choice



Increase or decrease levels, set options or access further menus



Press the TV/AV button to exit the Setup menu

AV2 out



Offers a choice of signals to send to the AV2 Scart socket. You can choose from the current TV programme position, the signal entering **AV1 / AV3 / AV4** or **Monitor** – the picture displayed on screen.

Teletext



The Teletext option allows you to choose between FLOF or LIST mode. See page 23.

Off timer



Off timer will switch the TV off within a preset time which you can choose from between 0 to 90 minutes in 15 minute intervals.

Flicker reduction



You will normally find that Flicker reduction is best set to **On** to reduce any slight picture movement. However, it is possible that some occasional broadcasts may benefit by selecting the **Off** position.

Q-Link



Q-Link allows you to enable or disable data communication with a compatible VCR. See page 21.

Text language



Select character set, so that all characters needed are available for text on teletext pages (eg: cyrillic characters, etc).

Mode Languages

West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish

East1: English, Estonian, Lett, Rumanian, Russian, Ukrainian, Lithuanian

East2: Czech, Hungarian, Lett, Polish, Rumanian, Lithuanian

Tuning menu

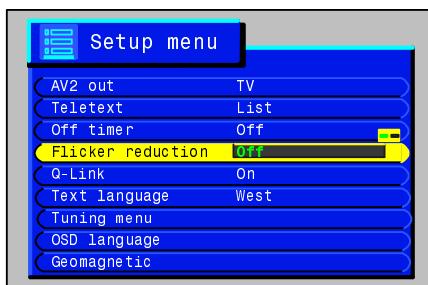
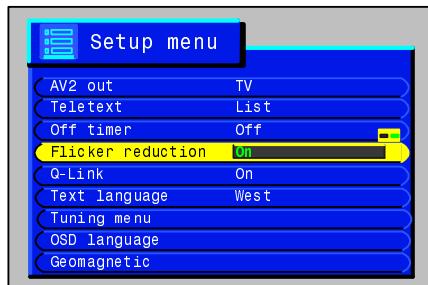
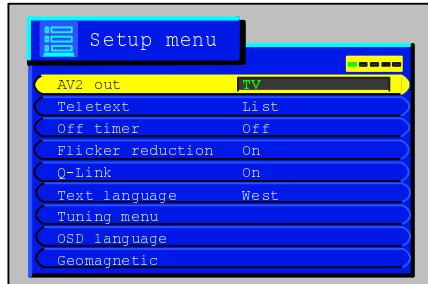
The Tuning menu provides an entry to many other features including Programme edit, ATP, Fine tuning, Manual tuning, Colour system and Volume correction. See page 14.

OSD language

OSD language allows you to select the language used for On Screen Displays. See page 20.

Geomagnetic

If you notice a slight tilt to the picture or if there are coloured patches at the corners of the screen, use this feature to eliminate them. See Step 6, page 5 (Quick Start Guide).



TUNING MENU

The Tuning menu provides access to manual, automatic and fine tuning menus

Open the Setup menu

SET UP



Move to Tuning menu

▲

▼

Access Tuning menu

◀

▶

Move to your choice

◀

▶

Increase or decrease levels, set options or access further menus

◀

▶

Press the TV/AV button to exit

TV/AV



Pressing the STR button after having adjusted some features will store the setting as the default (replacing the factory setting)

STR



Programme edit

Accessing the Programme edit menu will allow stations to be moved, added, deleted, named or locked and provides access to the TV –system. See page 15.

Auto setup

The Auto setup menu allows you to automatically retune the TV. See page 18.

Manual tuning

The Manual tuning menu allows individual programme positions to be tuned manually. See page 19.

Fine tuning

Stations can be finely tuned using the Fine tuning adjustment.

Colour system



The Colour system menu allows you to decide the correct choice of transmission standard.

Volume correc.

Volume correction allows you to adjust the volume level of individual stations.

Decoder (AV2)



This option is used when a decoder is connected via AV2. Set to On if a scrambled signal is to be processed by the decoder. Set to Off after use.

SET UP

▲

▼

◀

▶

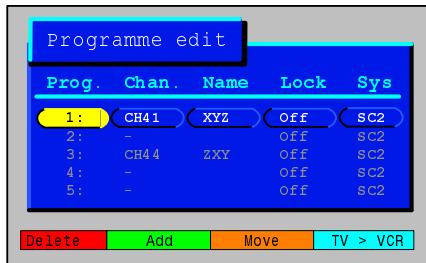
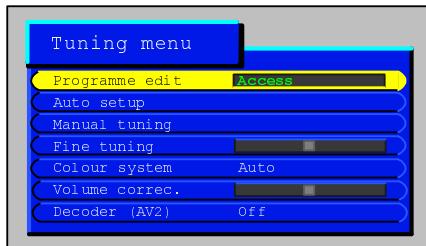
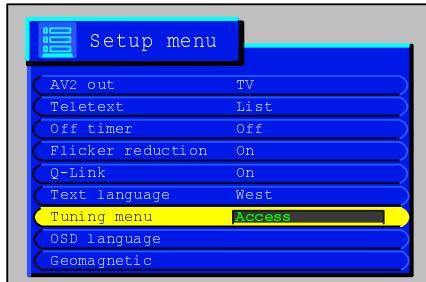
◀

▶

TV/AV



STR



TUNING MENU - PROGRAMME EDIT

The Programme edit menu allows you to edit the programme position settings

Open the Setup menu



Move to Tuning menu



Access Tuning menu



Move to Programme edit menu



Access Programme edit menu



Move to chosen programme position
(eg: Prog. 3)



Make required changes
(see sections below)



Press STR button to store changes



If you have finished in the
Programme edit menu, press the TV/AV
button to exit



To delete an unwanted programme position

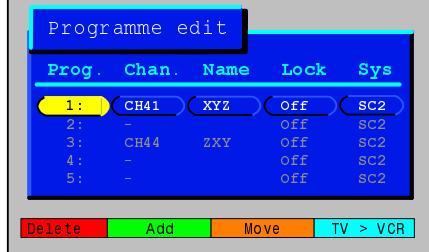
Make sure the cursor is in the Prog.
column



Press the Red button on remote control



Press the Red button again to
confirm



To add a programme position

Make sure the cursor is in the Prog.
column



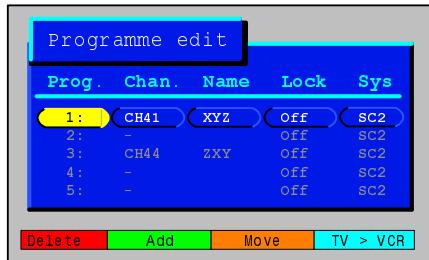
Press the Green button



Press the Green button again to
confirm



This blank programme can then be
tuned, named, locked and be allocated
your choice of TV-system



TUNING MENU - PROGRAMME EDIT

To move a programme to another position

Make sure the cursor is in the **Prog.** column

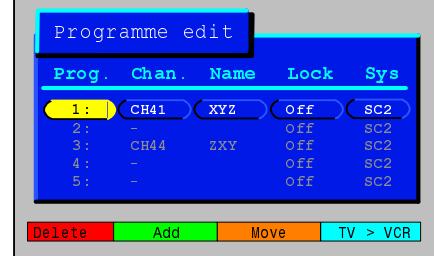


Press the **Yellow** button on remote control



Choose new position

Press the **Yellow** button again to confirm



To tune a programme position

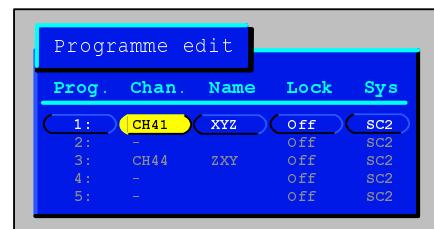
Move to the **Chan.** column



Increase or decrease channel number or use the 'C' key for Direct Channel Access or use the 'C' and '---' buttons for Direct Channel Access in hyperband (see page 6)



Press **STR** to store



To rename a programme position

Move to the **Name** column



Choose the new character

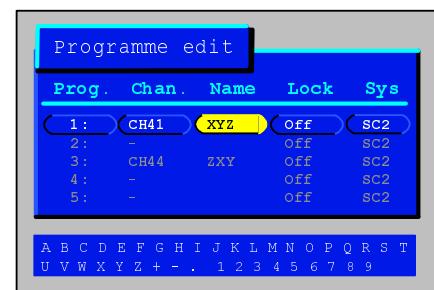
Move to the next character position



Continue until renaming is done



Press **STR** to store



TUNING MENU - PROGRAMME EDIT

To lock a programme position to prevent access

Move to the Lock column



Choose between lock on or lock off



Press STR to store



Programme edit					
Prog.	Chan.	Name	Lock	Sys	
1:	CH41	XYZ	Off	SC2	
2:	-		Off	SC2	
3:	CH44	ZXY	Off	SC2	
4:	-		Off	SC2	
5:	-		Off	SC2	

Note:

When a programme position is locked, Direct Channel Access using the 'C' and numeric keys on the remote control is not available for.

To change the TV-system for a programme position

Move to the Sys column



Choose the required sound system:

SC1 : PAL B/G, H / SECAM B/G

SC2 : PAL I

SC3 : PAL D/K / SECAM D/K

F : SECAM L/L'



Press STR to store



Programme edit					
Prog.	Chan.	Name	Lock	Sys	
1:	CH41	XYZ	Off	SC2	
2:	-		Off	SC2	
3:	CH44	ZXY	Off	SC2	
4:	-		Off	SC2	
5:	-		Off	SC2	

To copy programme information to a compatible VCR connected to AV2

Move to the Prog. column



Press the Blue button on the remote control

Programme data will now be sent to the VCR. This might take a few seconds, depending on the number of stations stored. If the message "Q-Link?

Unable to download, check your VCR" appears on the screen, the television is unable to send the programme information to the VCR. See the VCR handbook for further information.



TV>VCR DOWNLOAD IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

TUNING MENU - AUTO SETUP (ATP)

The Auto setup menu will allow you to automatically retune the TV to your local stations.
It is useful if you move to a different region

Open the Setup menu



Move to Tuning menu



Access Tuning menu



Move to Auto setup



Access Auto setup



Press to confirm start



Select your country

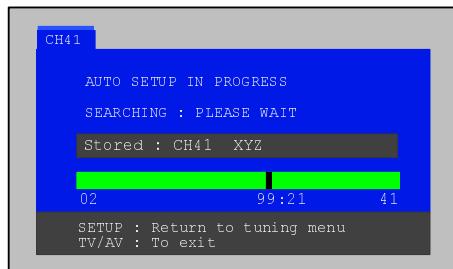
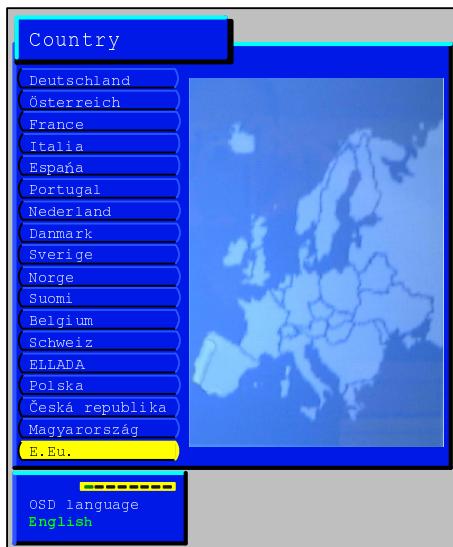
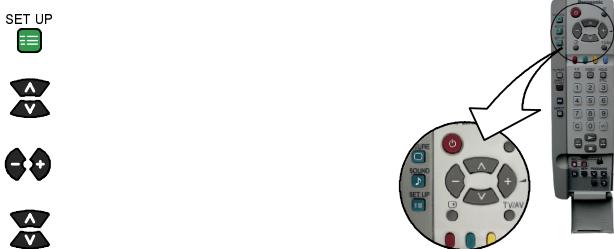


Press to start Auto setup (ATP)



The TV will search for, locate and sort into order your local stations.
If a compatible VCR is connected via the AV2 socket, programme data will be sent to the VCR via Q-Link (see page 21)

Once this operation is completed the TV will display programme position 1



TUNING MENU - MANUAL TUNING

Manual tuning of the Programme positions is available either from the On Screen Display menu or from the front panel controls

Manual tuning menu

Open the Setup menu

SET UP



Move to Tuning menu



Access Tuning menu



Move to Manual tuning



Access Manual tuning



Select the programme position to be tuned



Start tuning



When the desired programme is found, press STR to store

STR



Press the TV/AV button to exit

TV/AV



Manual tuning (Front panel)

Press the F button (Front panel) until "Tuning mode" is reached



Press the - or + button to access Tuning mode



Press the TV/AV button to move between "Change programme", "Search" or "Change TV system"

TV / AV



Press the - or + button to change programme position, start search, or alter TV system

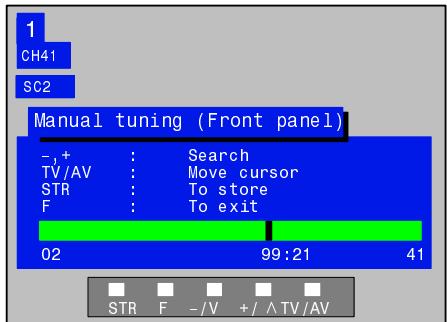
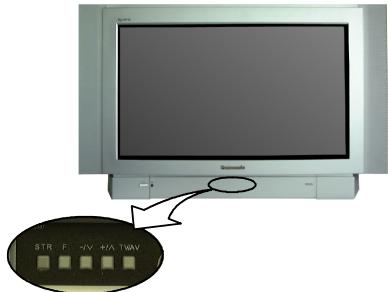
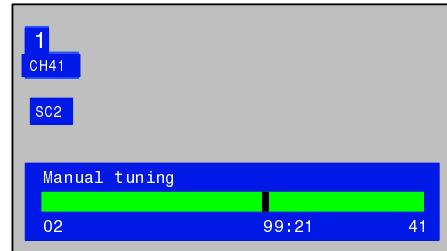


When the desired station is found, press STR to store the changes

STR



Repeat above procedure to tune additional programmes or press the F button to exit



OSD LANGUAGE

When you first installed the TV the On Screen Display language was set according to your choice of country. If you wish to use a different language then it can be chosen from the OSD language menu

Open the Setup menu



Move to the OSD language menu



Access the OSD language menu



Move to your choice



Press the TV/AV button to select and exit



Q-Link allows the television to communicate with your VCR

Open the Setup menu



Move to Q-Link



Confirm Q-Link is set to "On"



Press the TV/AV button to exit



The VCR must be connected with a SCART lead (full function type) attached between the AV2 socket of the television and the appropriate socket on your VCR. See the VCR handbook for further information. Q-Link, NEXTVIEWLINK or similar technology allows the television to instruct a compatible VCR to record the programme that is currently being displayed on screen, regardless of the programme position set on the VCR, thus simplifying the process of recording programmes.

To record the programme you are currently watching



Press the DIRECT TV REC button on the remote control

If the VCR is off, it will automatically switch on when you press the DIRECT TV REC button.

A message, sent from the VCR, will appear on screen showing what is being recorded, or if it is not possible to record:

VCR recording preset prog

VCR recording own tuner

VCR is recording the programme signal from its own tuner. If you wish you can switch off the TV and leave the VCR recording in the normal way.

VCR recording TV source

VCR is recording the programme signal from the television. You must not change programme position or switch off the TV; if you do, the VCR will automatically stop recording and switch off.

No recording - TAPE IS PROTECTED

The write protection tab on the back of the cassette has been removed.

Examples of other messages that might be displayed are:

No recording - NO TAPE

No recording - VCR IS PLAYING

VCR recording VCR external

No recording - ALREADY RECORDING

No recording - TAPE MAY BE DAMAGED

No recording - NO SOURCE AVAILABLE

To share tuning information

To ensure correct recordings are made, the television and VCR should share tuning information – see page 15 – 17.

- Whenever the Auto setup (ATP) function is used, tuning data will be downloaded to the VCR.

Auto Power functions

With Panasonic Q-Link VCRs these additional features are available:

- If you insert a tape in your VCR and press the Play button, the television will automatically switch on and select the AV2 input so you can view the tape.
- If you switch off the television whilst the VCR is in Stop, Fast Forward or Rewind modes, the VCR will switch off automatically.

To turn off Q-Link communication

If you do not wish to use the Q-Link feature, go to the Setup menu and set the Q-Link option to "Off". See page 13.

Important Note:

Not all VCRs support this type of data communication system. Some may support certain features, but not others. See the VCR handbook for further information.

If Q-Link is inoperative, first confirm that your SCART lead is a full function type. Ask your dealer for further details.

The Remote Control is capable of operating some functions of selected Panasonic VCRs and DVD (Digital Versatile Disc) equipment. Some VCR and DVD equipment have different functions, so to ensure compatibility please refer to the equipment's instruction book or consult your dealer for details.



	<p>Standby Press to switch the VCR or DVD to standby mode. Press again to switch back on.</p>
	<p>VCR / DVD switch Use this switch to select whether controls operate DVD equipment or your VCR.</p>
	<p>Play Press to playback the tape or DVD.</p>
	<p>Stop Press to stop the tape or DVD.</p>
	<p>Skip / Fast Forward / Cue VCR: Press to fast forward the tape. In Play mode, press to view the picture rapidly forward. DVD: Press once to skip to the next track. In play mode press and hold to view the picture rapidly forward.</p>
	<p>Skip / Rewind / Review VCR: Press to rewind the tape. In Play mode, press to view the picture rapidly in reverse. DVD: Press once to skip to the previous track. In play mode press and hold to view the picture rapidly in reverse.</p>
	<p>Pause / Still Press in playback mode, the picture will pause. Press again to restart play.</p>
	<p>Programme Up / Down Press to increase or decrease the VCR programme position by one.</p>
	<p>Record Press this button to start recording.</p>

TELETEXT OPERATION

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- Pressing the Picture button whilst in Teletext operation will display the contrast function with a cyan bar, press **◀ ▶** to alter the setting as required.
- Pressing the Setup button whilst in Teletext operation will display special function options at the bottom of the screen.
- Pressing the Sound button whilst in Teletext operation will display the volume function with a green bar, press **◀ ▶** to alter the setting as required.

What is LIST mode ?

In LIST mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

What is FLOF?

In FLOF mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.



TV / Teletext mode

Press the **TELETEXT** button to switch between the current programme, teletext and the **picture and text** feature (lets you see the current programme and teletext side by side, see page 10).



Page Selection

Pages can be selected in two ways :

- a. Press the Up / Down buttons to increase or decrease the page number by one.
- b. By entering the page number, using 0 – 9 on the remote control.



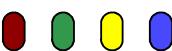
Full / Top / Bottom

Press the **SET UP** button to display special functions, followed by the **Green** button. Press the **Green** button again to expand the **BOTTOM** half. Press again to return to normal (**FULL**) size.



Reveal

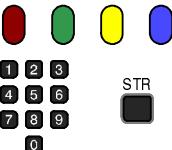
Press the **SET UP** button to display special functions, followed by the **Red** button to reveal hidden words e.g. quiz page answers. Press again to hide.



Red / Green / Yellow / Blue buttons

In FLOF mode these correspond to the differently coloured subjects.

In LIST mode they correspond to the differently coloured page numbers.



List Store

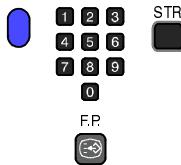
In LIST mode the four page numbers can be altered (programme positions 1 – 25 only). To do this, press one of the four coloured buttons and enter the new page number. Press and hold **STR**, the page numbers will change to white indicating that the page is stored.



Hold

To hold the Teletext page when viewing multi – page information. Press again to return to automatic page update.

It is not possible to change the programme position when in News flash, Update or Sub Coded Page Access operation.



Favourite Page (F.P.)

Stores a favourite page in memory for instant recall. To store such a page, the TV must be in LIST mode, and the programme position must be from 1 – 25. Press the **Blue** button, select the page number, then press and hold the **STR** button. The page number is now stored.

Press **F.P.** to recall this page.

Update Display

Press the **SET UP** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page (this is not necessary in **picture and text** mode, as the picture is displayed on the left of the screen). When found, the screen will display the page number at the top left. Press the **Yellow** button to view the page. Press **TV / TEXT** again to return to normal TV operation.



News Flash

When a news flash page has been selected, press **SET UP**, **Yellow**, to view the TV picture. When an update is received, the page number will be displayed on screen. Press the **Yellow** button to display the News Flash. Press **TV / TEXT** to return to normal TV operation.

Update

Press **SET UP**, **Yellow** to see the update of information on certain pages. When an update is received, the page number will be displayed at the top left of the screen. Press the **Yellow** button to view the page. Press **TV / TEXT** to return to normal TV operation.

Accessing sub pages

When Teletext information exceeds one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. As each sub page is found its number is displayed at the top of the page so that you may select it; as more sub pages are picked up, the display at the top of the page changes, so that you are always offered the most recently transmitted selection of sub pages.



In **picture and text** mode, use the left and right cursor buttons to select a sub page from the range displayed at the top of the Teletext window.

In Teletext operation, use the following procedure to access sub pages:

If the sub page you want to look at is not yet available, press the **SETUP** button (to display special functions) followed by the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.

When the sub page you are waiting for is available press the **Yellow** button to return to viewing the Teletext pages, then use the left and right cursor buttons to select the sub page of your choice.

Notes:

- If you do not want the four coloured special function keys to be displayed on the TV picture while waiting for a sub page to be found, press either the **PICTURE**, **SOUND** or **SETUP** menu button to clear the keys from the screen. Press the **SETUP** key once more to redisplay the keys.
- If you have cleared the special function keys from the screen and then used the left and right cursor buttons to select a sub page, whilst still viewing the TV picture, you must press the **SETUP** button then the **Yellow** button to display the Teletext page again.
- If the top of the page indicates that sub pages are being transmitted but the page displayed never changes, then the 'sub page number' is there to show the page contents have been updated, there are no sub pages.

Press **TV/TEXT** to return to normal TV operation.

Index

When in FLOF operation

Press **INDEX** to return to the main index page.

Depending on the way information is transmitted, this may have to be pressed more than once to return to the main index page.



AV Select and Setup

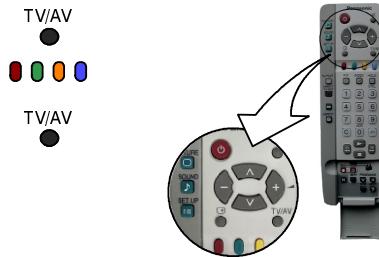
It is possible to connect a variety of additional equipment to this TV. The following pages detail how to connect external equipment to both the front and rear of the TV.

Once your equipment is connected, use the following procedure to view the input:

Press the **TV/AV** menu button

Press the relevant on screen selector key to select the AV source you wish to view (for example, press the green button to select **AV2** if you have connected a video recorder to the AV2 SCART socket).

The on screen selector keys that appear clear after a few seconds. If you want to select an input when the keys are not shown, press the **TV/AV** key once more and the keys will reappear.

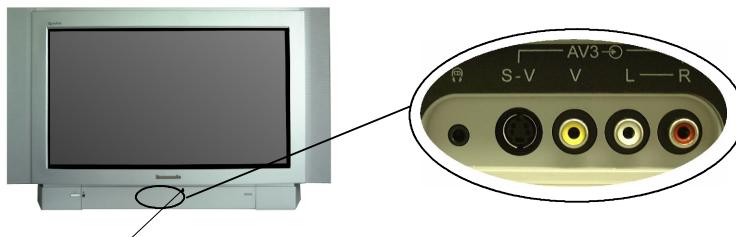


Notes:

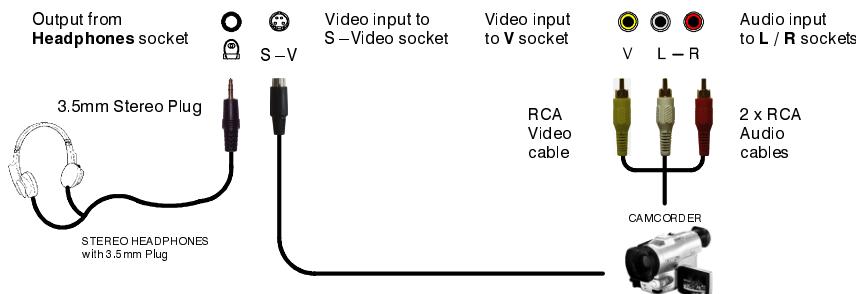
- This television may automatically switch over to the AV mode if the connected device sends a switch signal to the SCART cable connector. In this case, the "EC" will be displayed in the left top corner of the screen and the signal from the AV equipment (for the RGB signal the "EC/RGB" will be displayed). The picture received will remain the same when the TV programme is changed.
- You may switch back to the television by pressing button "TV/AV" or by disconnecting the AV device.
- You can also select an AV source using the **TV/AV** button on the control panel on the front of your TV. Press the **TV/AV** button repeatedly until you reach the AV source you wish to view.
- When in **AV mode** a reduced number of options are available in the **SOUND** and **SETUP** menus (eg: in the Setup menu there is no *Tuning menu* option).

Front sockets

Additional equipment can be connected at the front of the TV via a 4 pin S-Video socket (AV3), RCA Audio / Video sockets (AV3) and a headphone socket.



Press and release to open

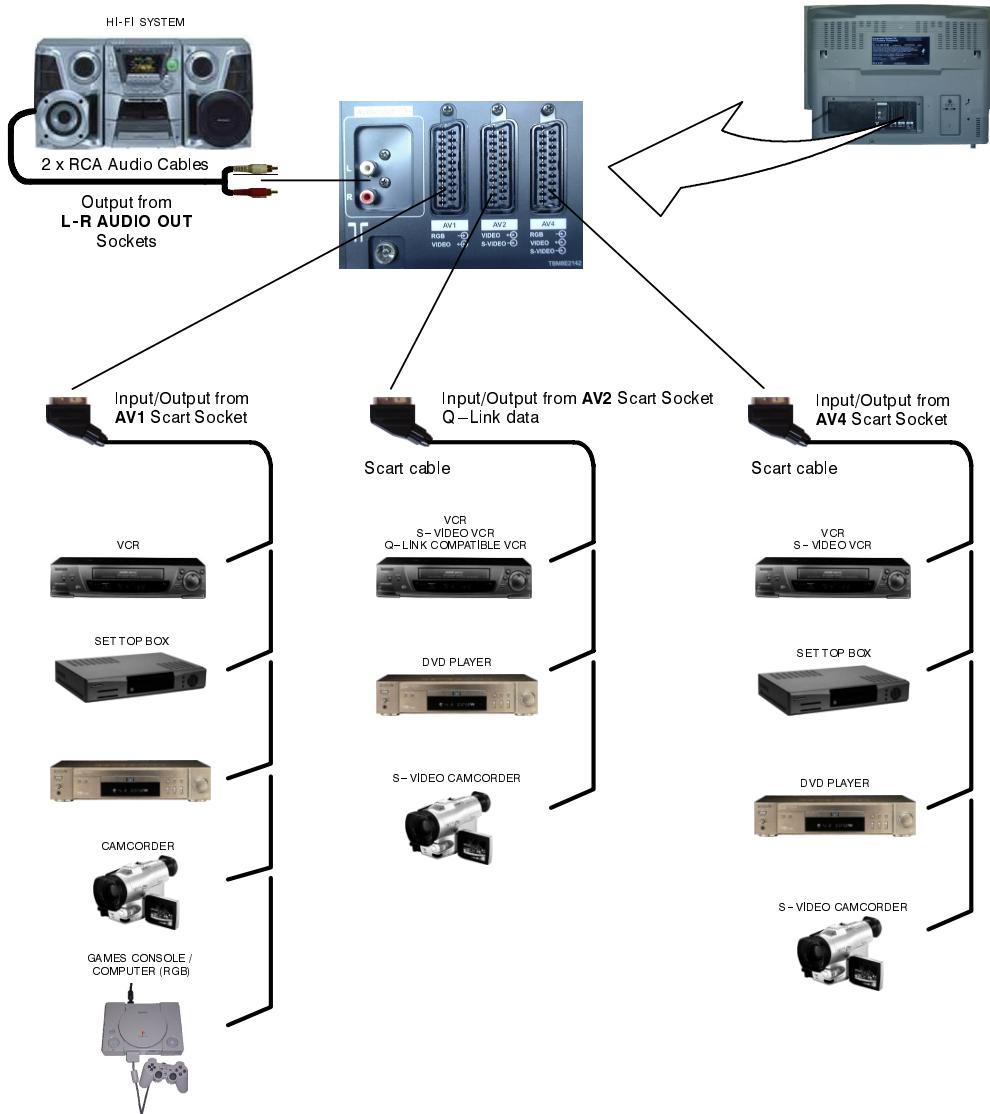


Notes:

- Additional equipment and cables shown are not supplied with this TV set.
- For S-Video socket wiring information see page 28.

Rear sockets

Additional equipment can be connected at the rear of the TV via three 21 pin Scart sockets, AV1 / AV2(S) / AV4(S).

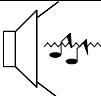
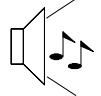
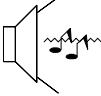
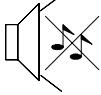
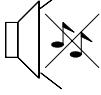
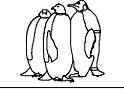
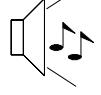
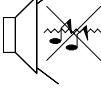
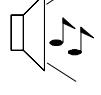
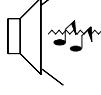


Notes:

- Additional equipment and cables shown are not supplied with this TV set.
- Do not connect a computer with TTL output (5V) to this set.
- The AV2 21 pin socket can also be used as an output to Audio/Video equipment; see page 13 for details.
- For Scart socket wiring information see page 28.

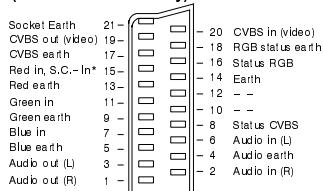
TROUBLESHOOTING

Service: If there is a problem with your TV please refer to the table below to determine the symptoms, then carry out the suggested check. If this does not solve the problem, please contact your local Panasonic dealer, quoting the model number and serial number (both found on the rear of the TV).

Symptoms		Checks
Picture	Sound	
		Aerial location, direction or connection Noisy Sound
		Aerial location, direction or connection Normal Sound
		Electrical appliances Cars / Motorcycles Fluorescent lights Noisy Sound Switch on P - NR in Picture menu to reduce picture noise
		Volume level Sound mute switched on No Sound
		TV set to AV mode Not plugged into A.C. outlet Not switched on Picture / Sound controls set at minimum levels Check if in standby mode No Sound
		Colour controls set at minimum levels Normal Sound
		Retune Channel(s) Weak or No Sound
		Magnetic Interference from unshielded equipment Receiver moved while switched ON, switch TV off for 30 minutes. If picture is also tilted, use Geomagnetic Correction feature (see Quick Start Guide, page 5) Normal Sound
		Sound reception may have deteriorated. Switch MPX setting (Sound menu) to Mono until reception improves. Weak or distorted sound

SCART AND S – VIDEO SOCKET INFORMATION

AV1 / AV4 Scart socket (S – Video – AV4 only)

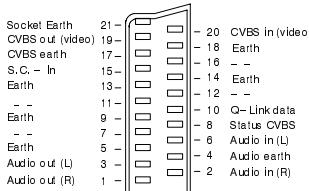


Suitable inputs for **AV1 / AV4** include RGB (Red/Green/Blue).

S.C.-In* : on Pin 15 'S.C.-In' only applies to **AV4**.

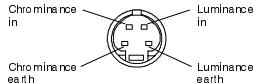
AV4 – Pins 15 and 20 are dependent on AV4 S – VHS / VIDEO switching.

AV2 Scart socket (S – Video, Q – Link)



AV2 – Pins 15 and 20 are dependent on AV2 S – VHS / VIDEO switching.

S – Video 4 pin socket



SPECIFICATIONS

	TX-32PS10F	TX-28PS10F												
Power Source	220 – 240 V AC 50 Hz													
Power Consumption	114 W	105 W												
Standby Consumption	0,6 W	0,6 W												
Picture Tube Visible Diagonal	76 cm	66 cm												
Audio Output Music Power	2 x 10 W RMS (2 x 20 W MPO), 8 Ω													
Dimensions	<table border="1"> <tr> <td>H</td><td>564 mm</td></tr> <tr> <td>W</td><td>902 mm</td></tr> <tr> <td>D</td><td>553 mm</td></tr> </table>	H	564 mm	W	902 mm	D	553 mm	<table border="1"> <tr> <td>H</td><td>509 mm</td></tr> <tr> <td>W</td><td>807 mm</td></tr> <tr> <td>D</td><td>534 mm</td></tr> </table>	H	509 mm	W	807 mm	D	534 mm
H	564 mm													
W	902 mm													
D	553 mm													
H	509 mm													
W	807 mm													
D	534 mm													
Weight	55,5 kg	43 kg												
Receiving Systems/ Band name	PAL B/G, H, SECAM B/G VHF E2 – E12 VHF A – H (ITALY) CATV (S01 – S05) CATV S11 – S20 (U1 – U10) PAL D/K, SECAM D/K VHF R1 – R2 VHF R6 – R12 PAL 525/60 Playback of NTSC tape from some PAL video recorders (VCR) M.NTSC (AV input only) Playback from NTSC 4,43 MHz Videorecorders (VCR) NTSC (AV input only) Playback from NTSC Videorecorders (VCR)													
Number of programme positions	99 + VCR													
Aerial – Rear	UHF / VHF													
Headphones – Front	3,5 mm, 8 Ω impedance													
AV – Rear	AV1 – 21 pin terminal – Audio / Video in / out, RGB in. AV2 – 21 pin terminal – Audio / Video in/out, S-Video in, Q-Link 2 x RCA Audio Monitor Out AV4 – 21 pin socket – Audio / Video in / out, S-Video in, RGB in.													
AV – Front	AV3 – S – Video in, 2 x RCA Audio in, 1 x RCA Video in.													

Specifications are subject to change without notice. Weight and dimensions shown are approximate.

2003CS